Potentiometric Surface of the Alluvial Aquifer and Hydrologic Conditions at the Rio Nigua de Salinas Alluvial Fan, Salinas, Puerto Rico, July 8–11, 2002

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A recent study conducted in the Rio Nigua de Salinas alluvial fan revealed that the potentiometric surface is below sea level and that there is a hydropotential gradient that extends to the south. This gradient is caused by the recharge of water through the fan and the discharge of water through the drainage network. The study was conducted using a combination of field and laboratory methods, including the installation of piezometers, the measurement of water levels, and the analysis of water samples.

The results of the study indicate that the potentiometric surface is highly dynamic and that it is influenced by the local climate and the hydrological conditions. The study also revealed that the alluvial fan is a significant water source for the surrounding area and that it is an important site for water management and conservation efforts.

The study was conducted in collaboration with the USGS and the Puerto Rico Department of Natural and Environmental Resources. The results of the study are available in a report that can be downloaded from the USGS website.